

Sustainable Amazonian Landscapes

Working Package 2:
Monitoring effects of land
use options on livelihoods
and CC adaptation capacity



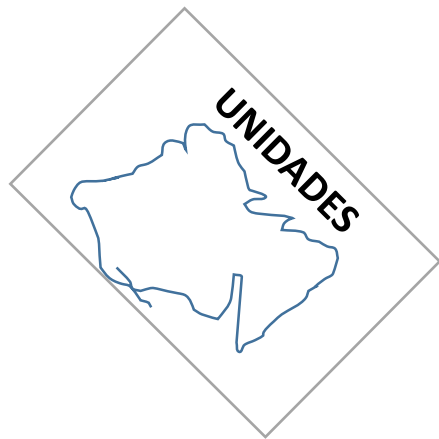
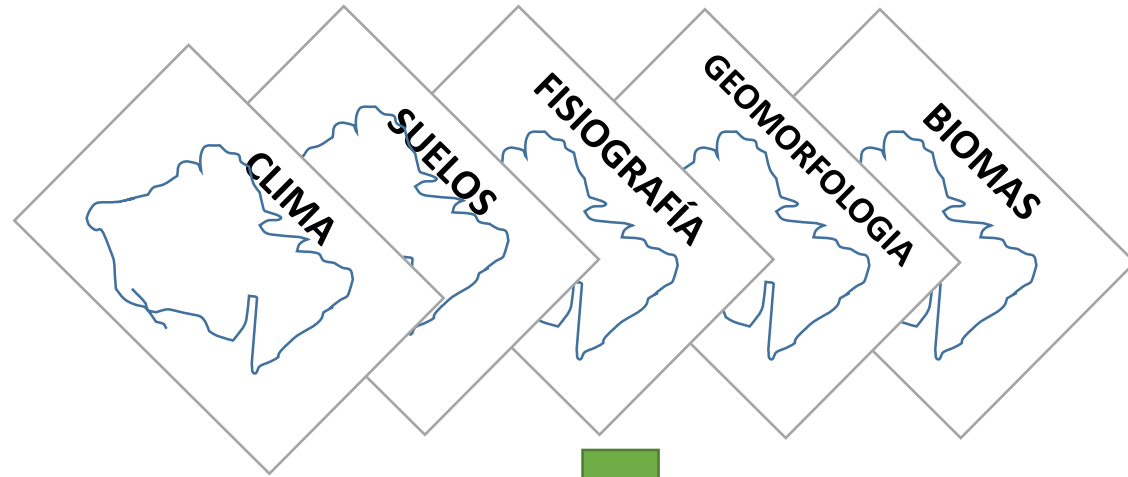
Improved land use options

- Controlled grazing/pasture rotation with living fences
- Agroforestry based cacao
- Enrichment of fallows with timber species to create green corridors and protect water springs



Paisajes Sostenibles para la Amazonía

Definition of project boundaries



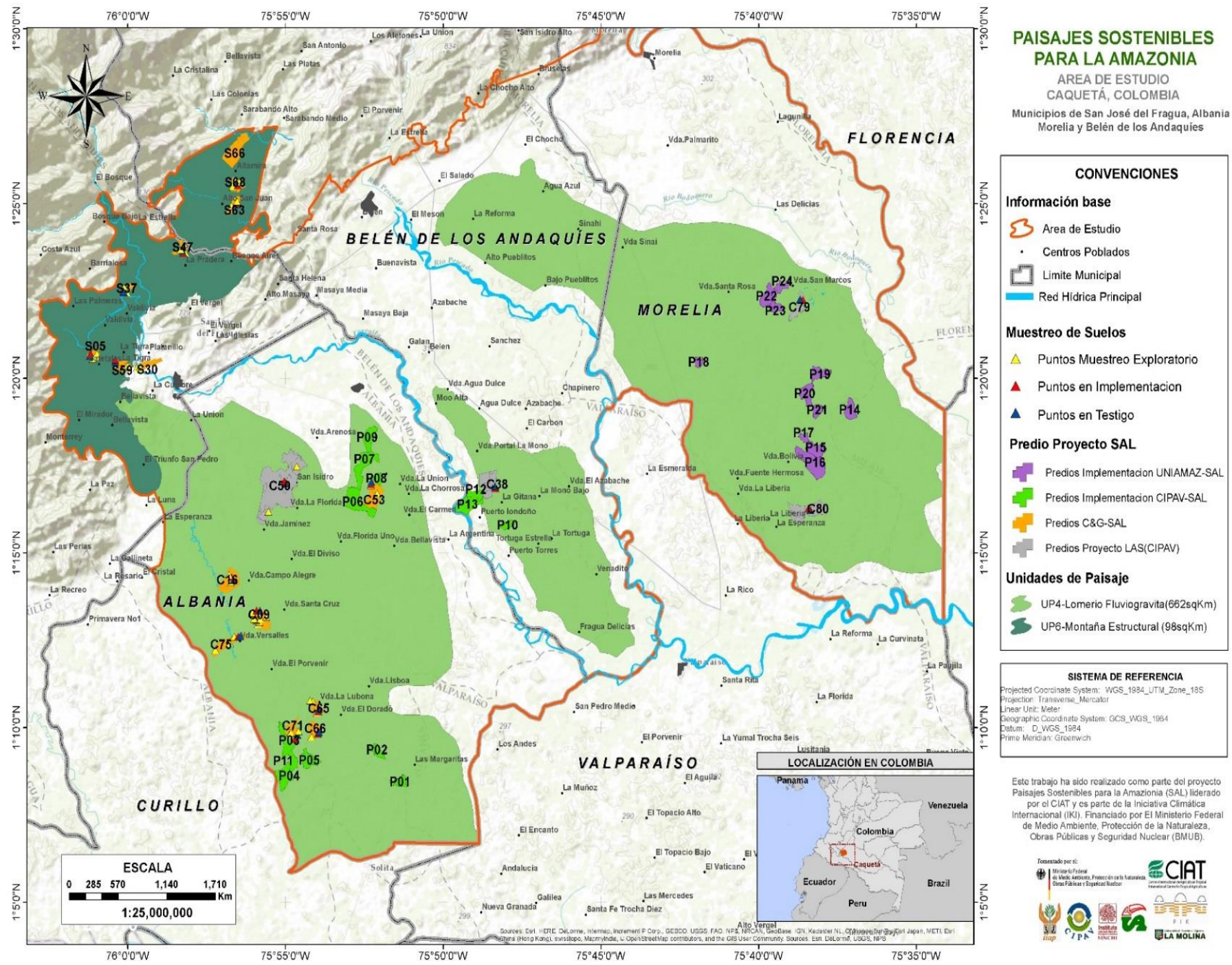
+



The landscape units (UP) are parts of the geographical space that are relatively homogeneous in composition and morphology. The first step is to select the landscape units, in order to

- Understand the heterogeneity of the study area
- **Include this known heterogeneity in the sampling strategy**
- Understand the limits of the extrapolation of the results.

Definition of project boundaries



Soil parameters

Physics/Chemistry

- Available water content
- Bulk density, porosity, texture
- Soil compaction
- Organic matter
- pH, P, CIC, K, Al, Ca, Mg, S, Fe, Cu, Mn, Zn, B

Macrophauna

- Ants, worms, termites

Soil aggregation

- Biochemistry: mycorrhiza, soil microbial biomass, respiration

Different land
uses, land covers
and
management
options



Social indicators

- **Wellbeing indicators:**
 - Material wellbeing at household level: material style of living, quality of house, economic variables (income, expenditures, remittances, loans)
 - Non-material wellbeing at household level: psycho-social wellbeing indicators, associativity
 - Indicators related to the farming system: diversification of land use, crops and livestock, productivity, access to markets, use of ecosystem services
 - Household dependency index, labor availability, education, sources of additional income (not related to the farm), migration
 - Health, food security
- **Vulnerability to climate change = sensitivity + adaptive capacity**
 - Sensitivity
 - Natural, financial, physical and human indicators of sensitivity
 - Adaptive capacity
 - Natural, financial, physical and human indicators of adaptive capacity

$X_1 X_2 X_3 \dots$
 X_n



$Y_1 Y_2 Y_3 \dots$
 Y_n



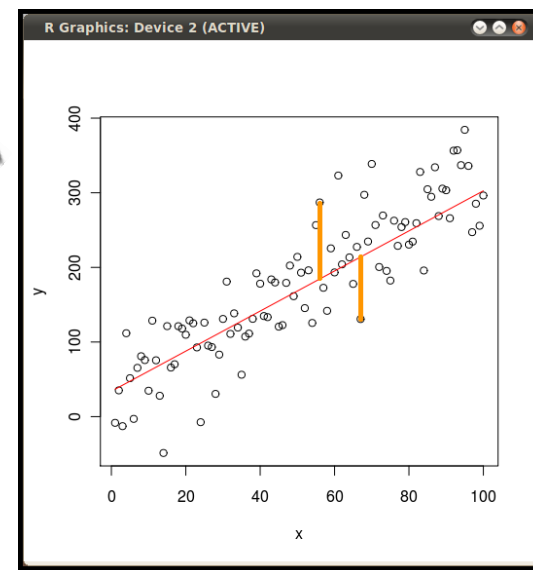
$Z_1 Z_2 Z_3 \dots Z_n$



Confirmatory Factor Analysis: set of hypotheses that form the conceptual basis for the factor analysis

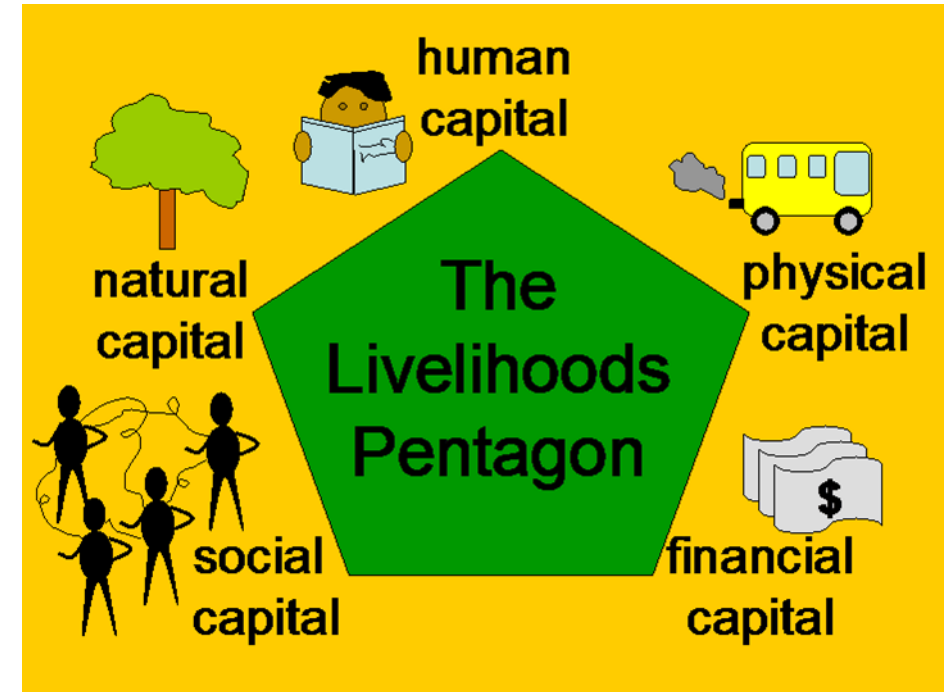
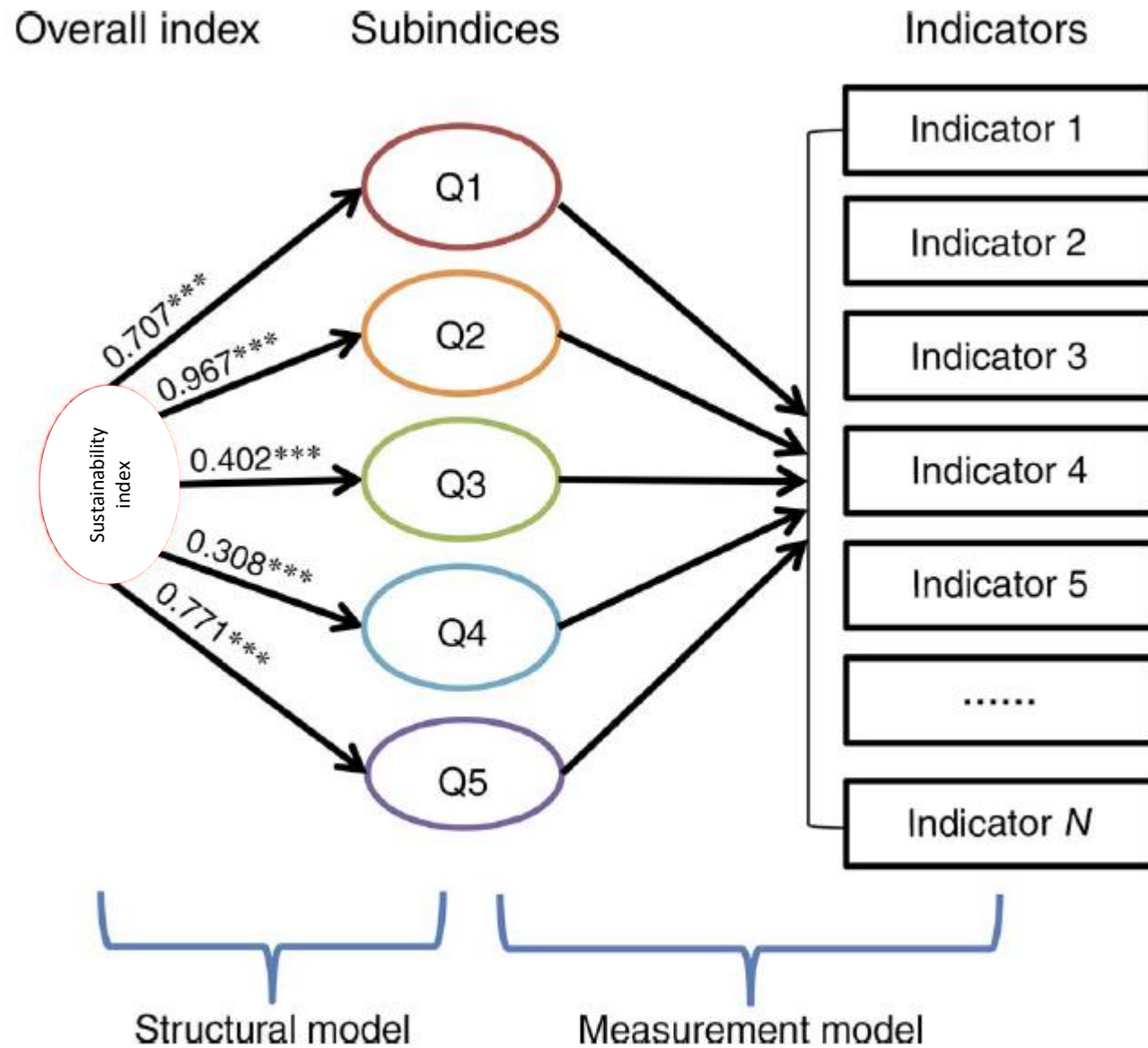


Sub.1
Sub.2
Sub.3



Índice

Paisajes Sostenibles para la Amazonía



Paisajes Sostenibles para la Amazonía